# IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS WACO DIVISION

	§	
SIERRA CLUB,	§	
	§	
Plaintiff,	§	
	§	
VS.	§	
	§	Civil Action No. 6:12-cv-108
ENERGY FUTURE HOLDINGS	§	
CORPORATION and LUMINANT	§	
GENERATION COMPANY, LLC,	§	
	§	
Defendants.	§	

### SIERRA CLUB'S ORIGINAL COMPLAINT

# I. INTRODUCTION

- 1. Sierra Club ("Plaintiff") brings this lawsuit on behalf of itself and the public to prevent Energy Future Holdings Corporation and Luminant Generation Company, LLC (collectively, the "Defendants") from violating the federal Clean Air Act ("CAA" or the "Act") and exposing the public to excessive and unlawful amounts of harmful air pollution from the Big Brown Steam Electric Station ("Big Brown plant"). Plaintiff alleges that the Big Brown plant has exceeded, and continues to exceed, federally enforceable limits on the amount of air contaminants—specifically, particulate matter or soot—that the power plant is allowed to emit into the air.
- 2. Particulate matter ("PM") is a mixture of small particles, including organic chemicals, metals, and ash, which can cause health and environmental problems. Once inhaled, particulate matter can affect the heart and lungs and cause serious health effects. Numerous

scientific studies have linked exposure to particulate matter to increased respiratory symptoms, such as decreased lung function, aggravated asthma, chronic bronchitis, in addition to heart attacks and premature death in people with heart or lung disease. Furthermore, PM can be carried long distances to settle over land and water, which may result in pollution of lakes and streams, and damage to farmlands. The U.S. Environmental Protection Agency ("EPA") has relied on PM emissions as a surrogate for mercury pollution, a highly toxic metal that can adversely affect a baby's growing brain and nervous system. *See, e.g.*, National Emission Standards for Hazardous Air Pollutants from Coal- and Oil-fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units, 77 Fed. Reg. 9,303, 9,367 (Feb. 16, 2012) (for existing and new oil-fired electric generating units, establishing PM as a surrogate for toxic metals, including mercury and arsenic).

- 3. Opacity is an indicator of the excessive levels of particulate matter pollution being emitted by a facility. Essentially, opacity measures the level of soot in the facility's exhaust. Texas rules define opacity as "the degree to which an emission of air contaminants obstructs the transmission of light expressed as a percentage of light obstructed as measured by an optical instrument or trained observer." 30 Tex. ADMIN. CODE § 101.1(72). The higher the opacity, the less light passes through a plume of air pollution.
- 4. This suit seeks injunctive relief and the assessment of civil penalties pursuant to the citizen suit provision, 42 U.S.C. § 7604, of the Act.

## II. JURISDICTION, VENUE, AND NOTICE

5. This Court has subject matter jurisdiction under the Clean Air Act, 42 U.S.C. § 7604 (citizen suit provision), and the federal jurisdiction statute, 28 U.S.C. § 1331 (federal

question jurisdiction). The relief requested is authorized pursuant to 42 U.S.C. § 7604 and 28 U.S.C. §§ 2201 & 2202.

- 6. The violations complained of occurred and continue to occur at Defendants' Big Brown plant, a coal-fired power plant located in Freestone County, in the Western District of Texas. Venue is therefore proper in this Court, pursuant to Clean Air Act, 42 U.S.C. § 7604(c)(1) and the federal venue statute, 28 U.S.C. § 1391(b) & (c).
- 7. In compliance with 42 U.S.C. § 7604(b)(1)(A), on October 27, 2011, Plaintiff notified in writing the Defendants, the Administrator of the EPA, the Governor of Texas, and the Texas Commission on Environmental Quality ("TCEQ") of Plaintiff's intent to sue for the violations alleged in this complaint. More than sixty days have passed since the notice letter was sent. *See* Exhibit A (Notice of Intent to Sue). Defendants have violated and remain in violation of the Act. Neither EPA nor the TCEQ has commenced and is diligently prosecuting a court action to redress Defendants' ongoing violations.
- 8. Pursuant to the Clean Air Act's citizen suit provision, a copy of this complaint is being served on the Attorney General of the United States and the EPA Administrator.

#### III. PARTIES

#### A. Plaintiff

9. Plaintiff Sierra Club, which was founded in 1892 by John Muir, is one of the oldest and largest grassroots environmental organizations in the country, with members in Texas and throughout the nation. Sierra Club is dedicated to exploring, enjoying, and protecting natural resources and wild places. Sierra Club promotes the responsible use of the earth's ecosystems and resources, and educates and works to restore the natural environment. The Sierra Club has the specific goal of improving outdoor air quality.

- 10. Members of the Sierra Club live, work, and recreate in areas nearby and downwind of Defendants' Big Brown plant and have been and continue to be exposed to emissions from the coal-fired power plant. The aesthetic, recreational, environmental, economic and health-related interests of Plaintiff's members have been injured by Defendants' unlawful and excessive emissions of pollutants from the Big Brown plant into the air.
- 11. Plaintiff's members have suffered, and will continue to suffer, actual and threatened injury to their health and welfare due to Defendants' ongoing violations of the Clean Air Act described herein. Interests of Plaintiff's members that are directly injured by Defendants' excessive and illegal discharges of pollutants from the Big Brown plant include, but are not limited to: (1) breathing air free from Defendants' excessive pollution emissions, and without the negative health effects—and concern about those effects—that such emissions cause; (2) enjoying outdoor recreation, including fishing in nearby lakes and streams, that is unimpaired by pollution from the Big Brown plant's excessive emissions; (3) using and enjoying property, and viewing and enjoying natural scenery and wildlife that is unimpaired by pollution from the Big Brown plant's excessive emissions; and (4) protecting the natural ecology of the region from air pollution-related impacts.

#### **B.** Defendants

12. Defendant Energy Future Holdings Corporation, a corporation organized under the laws of Texas, through its subsidiary, Luminant Generation Company, a (Texas) Limited Liability Company ("LLC"), owns and operates the Big Brown plant. Luminant Generation Company, LLC, also owns and operates the Big Brown plant. Together, Defendants are Texas's largest electric power generators.

## IV. BACKGROUND

## A. The Big Brown Plant

- 13. Defendants own and operate the Big Brown plant, a coal-fired electric generating plant, located in Freestone County, Texas. The Big Brown plant consists of two main boilers, designated as Units 1 (600 Megawatts capacity) and 2 (595 Megawatts capacity), and associated facilities and material handling operations. Units 1 and 2 began operation in 1971 and 1972, respectively.
- 14. The Big Brown plant's main boilers emit into the air a slew of air contaminants, including particulate matter, sulfur dioxide, nitrogen dioxide, lead, carbon monoxide, mercury and arsenic, among others. In 2010, the plant emitted 1,610 pounds of mercury, more than any other power plant in the United States. *See* Dirty Kilowatts: America's Top Mercury Power Plant Polluters at 3 (Nov. 2011), http://www.environmentalintegrity.org/11\_15\_2011.php.
- 15. The Big Brown plant does not continuously monitor particulate matter emissions, other than through opacity monitors. Defendants rely on opacity to determine whether the power plant is complying with its particulate matter emission limit. Based on the terms of the Big Brown plant's Title V Operating Permit No. O65 ("Title V Permit"), opacity over 20 percent indicates that pollution controls are not functioning properly and that particulate matter emission limits are being exceeded. *See* Title V Permit (Exhibit B) at 39.
- 16. At all times relevant to this civil action, the Big Brown plant has been a "major source" within the meaning of Title V of the Act and the Texas State Implementation Plan ("SIP"). See 42 U.S.C. § 7661(2) (referring to 42 U.S.C. § 7602(d), which defines a "major stationary source" as "any stationary facility or source of air pollutants, which directly emits, or has the potential to emit, one hundred tons per year or more of any air pollutant . . ."); see 30

TEX. ADMIN. CODE § 116.12(17) (74 Fed. Reg. 11,851 (Mar. 20, 2009) (incorporating the federal definitions into the Texas SIP)).

### **B.** The Clean Air Act

17. The Clean Air Act is designed to protect and enhance the quality of the nation's air, so as to promote the public health and welfare and the productive capacity of its population.
42 U.S.C. § 7401(b)(1).

## i. State Implementation Plans

- 18. Pursuant to Clean Air Act Section 110, 42 U.S.C. § 7410, each state must adopt and submit to EPA for approval a State Implementation Plan, the overall body of state air pollution regulations and other requirements through which a state implements the Clean Air Act's permitting requirements. Once a state's SIP is approved by EPA, it is published in the Code of Federal Regulations and can be enforced by the state, EPA, or citizens. 42 U.S.C. §§ 7413 & 7604; 40 C.F.R § 52.23.
- 19. The Texas SIP limits the amount of various pollutants, including opacity and particulate matter, that power plants such as the Big Brown plant may emit. Under 30 TEX. ADMIN. CODE § 111.111(a)(1)(A), opacity from the Big Brown plant "shall not exceed 30 percent averaged over a six-minute period." EPA approved this standard as an applicable requirement of the Texas SIP. 40 C.F.R. § 52.2270(c); 61 Fed. Reg. 20,732, 20,734 (May 8, 1996) (approving the 30 percent opacity limit into the Texas SIP).
- 20. Furthermore, under 30 TEX. ADMIN. CODE § 111.153(b), emissions from the Big Brown plant may not exceed "0.3 pound of total suspended particulate per million [British

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<sup>&</sup>lt;sup>1</sup> This emission standard or limitation is suspended for up to six consecutive minutes each hour if it is determined that the event that caused the opacity exceedance in that period was the cleaning of a firebox or the building of a new fire, soot blowing, equipment changes, ash removal, or rapping of precipitators. 30 Tex. ADMIN. CODE § 111.111(a)(1)(E).

thermal units ("Btu")] heat input, averaged over a two-hour period." EPA approved this standard as an applicable requirement of the Texas SIP. 74 Fed. Reg. 19,144 (Apr. 28, 2009) (approving 30 Tex. Admin. Code § 111.153(b) into the Texas SIP).

# ii. Title V Operating Permits

- 21. Title V of the Clean Air Act, 42 U.S.C. §§ 7661-7661f, establishes an operating permit program for "major sources" of air emissions, such as the Big Brown plant. The purpose of Title V is to ensure that all the air pollution authorizations for a given facility and all "applicable requirements" for that facility are collected into a single federally-enforceable air pollution permit.
- Texas implements the Title V program pursuant to EPA-approved regulations in Texas Administrative Code, Chapter 122.<sup>2</sup> Section 502(a) of the Clean Air Act, 42 U.S.C. § 7661a(a), and the Texas Title V Operating Permit program have at all times relevant to this complaint made it unlawful for a permit holder to violate any requirement of his or her Operating Permit issued pursuant to Title V of the Clean Air Act, or to operate a major source except in compliance with a permit issued under Title V. 30 Tex. Admin. Code § 122.143(4) ("any noncompliance with either the terms or conditions codified in the [Title V permit] . . . constitutes a violation of the [CAA]").

#### iii. Citizen Suits

23. Any person may commence a civil enforcement action under the Act against any party "who is alleged to have violated . . . or to be in violation of an emission standard or limitation." *Id.* § 7604(a). An "emission standard or limitation" is any term or condition of a

<sup>&</sup>lt;sup>2</sup> EPA fully approved Texas's Title V Operating Permit program effective November 30, 2001. 66 Fed. Reg. 63,318 (Dec. 6, 2001).

permit issued under an approved State Implementation Plan, any standard or limitation under any approved State Implementation Plan, or any permit term of a Title V Operating Permit. *Id.* § 7604(f)(4).

## V. CAUSES OF ACTION

<u>Cause of Action No. 1</u>: Defendants violated and continue to violate the applicable opacity limit in the Texas SIP. The opacity limit is also enforceable through the Big Brown plant's Title V permit.

- 24. Plaintiff re-alleges and incorporates Paragraphs 1-23.
- 25. Under the Texas SIP, emissions from the Big Brown are subject to a 30 percent opacity limit (averaged over a six minute period).<sup>3</sup> 30 Tex. ADMIN. CODE § 111.111(a)(1)(A); 61 Fed. Reg. 20,732, 20,734 (May 8, 1996) (incorporating the 30 percent opacity limit into the Texas SIP).
- 26. According to Defendants' self-reported data, the Big Brown plant violated the 30 percent opacity limit on 6,520 occasions between July 2007 and December 2010, in violation of the Texas SIP, the Defendants' Title V Permit,<sup>4</sup> and the Clean Air Act. Unit 1 violated this limit

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<sup>&</sup>lt;sup>3</sup> The Big Brown plant is also subject to a 20 percent limit on opacity. Although Plaintiff alleges that the plant has consistently violated its 20 percent opacity limit, for purposes of judicial economy, this complaint alleges only violations of the 30 percent limit.

<sup>&</sup>lt;sup>4</sup> As mentioned above, Defendant's Title V Permit incorporates a lower, 20 percent opacity limit, applicable to the Big Brown plant's main boilers. *See* Title V Permit (Exhibit B) at 16 & 35 (citing TAC Board Order 90-14, which establishes a 20 percent opacity limit). Thus, emissions with greater than 30 percent opacity, necessarily also violate the 20 percent opacity limit.

3,069 times; and Unit 2 violated this limit 3,451 times.<sup>5</sup> *See* Notice of Intent to Sue (Exhibit A), Attachments B & C; Exhibit C.<sup>6</sup>

27. Many of these violations exceed 90 percent opacity, more than triple the plant's legal limit. In fact, during the fourth quarter of 2010, the only quarter that Defendants reported each opacity violation individually (rather than combining multiple violations together in blocks), the Big Brown plant's emissions exceeded 90 percent opacity almost twenty percent of the time (and exceeded 75 percent opacity approximately half of the time).

<u>Cause of Action No. 2</u>: Defendant violated and continues to violate the applicable particulate matter limit contained in the Texas SIP and the Big Brown plant's Title V permit.

- 28. Plaintiff re-alleges and incorporates Paragraphs 1-23.
- 29. 30 Tex. Admin. Code § 111.153(b), which has been approved by EPA into the Texas SIP, prohibits emissions from the Big Brown plant from exceeding "0.3 pound of total suspended particulate per million Btu heat input, averaged over a two-hour period." 74 Fed. Reg. 19,144 (Apr. 28, 2009) (approving 30 Tex. Admin. Code § 111.153(b) into the Texas SIP). The Big Brown Plant's Title V Permit also specifically incorporates the 0.3 lb/hour PM limit. Title V Permit (Exhibit B) at 35. These limits protect the public from harmful PM exposure, including mercury pollution, which, as discussed above, current science links to numerous human health effects.

<sup>&</sup>lt;sup>5</sup> 30 TEX. ADMIN. CODE § 111.111(a)(1)(E) allows for one exemption from the 30 percent opacity limit per hour "during the cleaning of a firebox or the building of a new fire, soot blowing, equipment changes, ash removal, and rapping of precipitators." In calculating the number of violations listed in the Notice of Intent to Sue and in this Original Complaint, we have conservatively exempted one 30 percent opacity limit violation per hour, under the generous assumption that the reason for the exceedance may fall under one of the allowable exceptions.

<sup>&</sup>lt;sup>6</sup> Attachment B to the Notice of Intent to Sue summarizes the number of opacity violations at the Big Brown plant by quarter. Attachment C to the Notice of Intent to Sue (not included with this Original Complaint) provided Defendants notice of each separate opacity violation between July 2006 and December 2010 (inclusive), including the date and time of each violation. Plaintiff removed those violations that are more than five years old in Exhibit C.

30. Using: (1) Defendants' self-reported heat input and sulfur dioxide emissions data (available at EPA's Clean Air Markets database); (2) Defendants' self-reported monthly heat content, sulfur content, and ash content of coal by coal type data (available on the Energy Information Administration's website); and (3) information contained in Defendants' Application for Amendment to Permit No. 56445 for Incorporation of Planned Maintenance, Startup, and Shutdown Activities (including estimated emissions and inputs), Plaintiff calculated PM emissions from Big Brown's main boilers. As illustrated in Attachment D to the Notice of Intent (Exhibit A), PM emissions from the Big Brown Plant violated the applicable PM limit on at least 370 occasions between January 2008 and July 2011.

### VI. PRAYER FOR RELIEF

WHEREFORE, based upon the allegations set forth above, Plaintiff respectfully requests that this Court:

- A. Declare that Defendants have violated and continue to violate the Clean Air Act, the relevant provisions of the Texas SIP, and their Title V Permit by failing to comply with the opacity and particulate matter limits mandated therein;
- B. Enjoin Defendants preliminarily and permanently from operating the Big Brown plant, except in accordance with a compliance schedule that will cause the plant to comply with the opacity and PM limits in the Texas SIP and their Title V permit in a timely manner;
- C. Order Defendants to take other appropriate action, including beneficial mitigation projects authorized under the Clean Air Act, 42 U.S.C. § 7604(g)(2), to remedy, mitigate, and offset the harm to the public health and the environment caused by the violations alleged above;

- D. Assess a civil penalty in the amount of \$37,500 per day, for each violation after January 12, 2009, and \$32,500 per day for each violation on or before January 12, 2009;
- E. Award Plaintiff its costs and attorneys' fees related to this action; and
- F. Grant such other relief as the Court deems just and proper.

Date: May 1, 2012 Respectfully submitted,

By: Cur Lonker

ENVIRONMENTAL INTEGRITY PROJECT

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